

### **REMARKS**

Claims 1-6 are currently pending in the subject application. By the instant amendment, claims 1, 3, 4 and 6 have been amended to correct minor errors noted by the Examiner, as well as additional minor errors noted upon review thereof. Claims 1 and 4 are independent.

Applicants appreciate the Examiner's acknowledgement of applicants' claim for foreign priority and receipt of a certified copy of the priority document.

Applicants further appreciate the Examiner's acceptance of the drawings filed on December 15, 2000.

Claims 1-6 are presented to the Examiner for further prosecution on the merits.

#### **A. Introduction**

In the outstanding Office action, the Examiner objected to the disclosure; objected to claim 3; rejected claims 1-3 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,167,037 to Higuchi et al. ("the Higuchi et al. reference") in view of U.S. Patent No. 6,269,088 to Masui et al. ("the Masui et al. reference"); and rejected claims 4 and 5 under 35 U.S.C. § 103(a) as being unpatentable over the Higuchi et al. reference in view of the Masui et al. reference, and further in view of U.S. Patent No. 6,226,315 to Sriram et al. ("the Sriram et al. reference").

#### **B. Asserted Objection to Specification**

The specification was objected to due to a number of minor informalities. These informalities, as well as other minor informalities noted upon review of the specification, have been corrected by the instant amendment. Therefore, it is respectfully requested that this objection be withdrawn.

#### **C. Asserted Objection to Claim 3**

Claim 3 was objected to due to a typographical error. This error, as well as other minor errors noted upon review of the claims, has been corrected by the instant amendment. Therefore, it is respectfully requested that this objection be withdrawn.

#### **D. Asserted Obviousness Rejection of Claims 1-3**

In the outstanding Office action, the Examiner rejected claims 1-3 under 35 U.S.C.

§ 103(a) as being unpatentable over the Higuchi et al. reference in view of the Masui et al. reference. This rejection is respectfully traversed for at least the reasons set forth below.

In the outstanding Office action, the Examiner relies on element 12 in FIG. 5 of the Higuchi et al. reference as disclosing the differentially coherent combining portion recited in claim 1. *Office action of May 17, 2003, at p. 3.* While the Higuchi et al. reference does appear to disclose use of the complex conjugate, it is respectfully submitted that this is not the same as the differentially coherent combining portion. First, it is noted that the apparatus in FIG. 5 is a transmitter, not a receiver. Further, the third spreading code of FIG. 5 in the Higuchi et al. reference is the complex conjugate of the second spreading code or long code, and is multiplied by the short code. In contrast, the *differentially* coherent combining portion recited in claim 1 multiplies “a complex conjugate value of a previous output of the long code masking correlation portion by a present output of the long code masking correlation portion.”

The receiver of the Higuchi et al. reference relied on by the Examiner is shown in FIG. 17, the long code is apparently multiplied with the short code, this product stored, and the long code altered. There is no disclosure or suggestion of using the complex conjugate. Indeed, this correlation in the Higuchi et al. reference would appear to only disclose the correlation performed by the long code masking correlation portion of claim 1.

In contrast, the present invention as recited in claim 1 uses the complex conjugate to capture all the signal energy to reduce the influence of fading or frequency shift. *See page 10, lines 7-19 of the subject application.* No such use is disclosed or suggested in the Higuchi et al. reference.

The Masui et al. reference fails to provide the teachings noted above as missing from the Higuchi et al. reference. Therefore, it is respectfully submitted that neither the Higuchi et al. reference nor the Masui et al. reference, either alone or in combination, disclose or suggest the present invention as set forth in claim 1. Claims 2-3 depend from claim 1 and are similarly believed to be allowable for at least the reasons set forth above. Therefore, it is respectfully requested that this rejection be withdrawn.

E. Asserted Obviousness Rejection of Claims 4-5

In the outstanding Office action, the Examiner rejected claims 4 and 5 under 35 U.S.C. § 103(a) as being unpatentable over the Higuchi et al. reference in view of the Masui

et al. reference, further in view of the Sriram et al. reference. This rejection is respectfully traversed for at least the reasons set forth below.

The Examiner relied on the same arguments noted above in rejecting claim 4, and relied on the Sriram et al. reference as teaching the additional elements of claim 4. Claim 4 also recites a differentially coherent combining portion that multiplies the complex conjugate of a delayed signal by the value input from the output terminal of a switch receiving the output of the long code masking correlation portion. The Sriram et al. reference fails to provide the teachings noted above as missing from the combination of Higuchi et al. reference and the Masui et al. reference. Therefore, claim 4 is believed to be allowable for at least reasons similar to those above regarding claim 1.

Therefore, it is respectfully submitted that neither the Higuchi et al. reference, the Masui et al. reference, nor the Sriram et al. reference, either alone or in combination, disclose or suggest the present invention as set forth in claim 4. Claim 5 depends from claim 4 and is similarly believed to be allowable for at least the reasons set forth above. Therefore, it is respectfully requested that this rejection be withdrawn.

F. Allowable Subject Matter

The indication that claim 6 would be allowed if rewritten in independent form is gratefully acknowledged. However, it is respectfully submitted that all of the claims are now in condition for allowance.

G. Conclusion

Since the cited prior art references neither anticipate nor render obvious the subject invention as presently claimed, applicants respectfully submit that claims 1-6 are now in condition for allowance, and a notice to that effect is respectfully requested.

The remaining documents cited by the Examiner were not relied on to reject the claims. Therefore, no comments concerning these documents are considered necessary at this time.

If the Examiner believes that additional discussions or information might advance the prosecution of the instant application, the Examiner is invited to contact the undersigned at the telephone number listed below to expedite resolution of any outstanding issues.

In view of the foregoing amendments and remarks, reconsideration of this application is earnestly solicited, and an early and favorable further action upon all the claims is hereby requested.

Respectfully submitted,

LEE & STERBA, P.C.

Date: August 16, 2004

*Richard A. Sterba* Reg. No. 43,162  
for: Eugene M. Lee, Reg. No. 32,039

LEE & STERBA, P.C.  
1101 WILSON BOULEVARD, SUITE 2000  
ARLINGTON, VA 22209  
703.525.0978 TEL  
703.525.4265 FAX

**PETITION and**  
**DEPOSIT ACCOUNT CHARGE AUTHORIZATION**

This document and any concurrently filed papers are believed to be timely. Should any extension of the term be required, applicant hereby petitions the Director for such extension and requests that any applicable petition fee be charged to Deposit Account No. 50-1645.

If fee payment is enclosed, this amount is believed to be correct. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-1645.

Any additional fee(s) necessary to effect the proper and timely filing of the accompanying papers may also be charged to Deposit Account No. 50-1645.